West Central Phoenix (WCP) West Osborn Complex

Water Quality Assurance Revolving Fund (WQARF) Site

Boundaries:

The WCP West Osborn Site (Site) is bounded approximately by the Grand Canal to the north, 31st Avenue to the east, McDowell Road to the south and 55th Avenue to the west.

Site Status Update:

ADEQ in conjunction with United Industrial Corporation agreed that the deep aquifer and the shallow aquifer shall be further characterized and remediated separately. The Feasibility Study (FS) Work Plan prepared by Geo Trans on behalf of United Industries Corporation has been revisited due to evidence that the shallow plume has migrated further south than anticipated. An addendum to the FS Work Plan for the placement of new monitoring wells was approved by ADEQ in August 2007. Drilling activities were initiated in September 2007. Results from these wells will be used to determine final revisions to the FS. ADEQ is awaiting a report following the placement of these wells. A draft FS that reflects the information garnered from the new wells will also be completed. ADEQ is awaiting the FS draft for the deep aquifer plume.

Community Involvement Activities:

A community advisory board (CAB) has been formed for the Site and meets on a regular basis. Details of meeting agendas and minutes for 2007 and 2008 can be viewed at http://www.azdeq.gov/environ/waste/sps/reg.html. These meetings are open to the public. An updated fact sheet can be found on the ADEQ Web site at http://www.azdeq.gov/environ/waste/sps/download/phoenix/wcpega/wcpgafact.pdf.

Site History:

1950-1970: The West Osborn Complex (WOC) facility was originally one large property (about 15 acres) located near 35th Avenue and Osborn Road. From the late 1950s to the mid 1970s, companies at the property manufactured electronic components. These businesses used TCE and other chemicals in the production and cleaning process. ADEQ learned that large quantities of TCE and other wastes were disposed of in septic tanks and seepage pits at the WOC property from the late 1950s until the late 1960s. TCE was also dumped onto the ground.

1982-1989: Volatile organic compounds (VOCs) were first detected in groundwater in the WCP area in July 1982. The City of Phoenix (COP) detected trichloroethylene (TCE) in four municipal public supply wells, COP #70, #71, #151, and #152. The Arizona Department of Health Services (ADHS), Salt River Project (SRP), and the COP confirmed the presence of VOCs in the groundwater with sampling in 1983, 1985, and 1986. Groundwater from COP Wells #70 and #71

contained the highest concentrations of TCE and, therefore, were immediately shut down. Wells #151 and #152 were monitored for VOC concentrations from 1982 until 1989. As a result of sampling conducted during February of 1989, COP elected to take both wells #151 and #152 off-line on March 7, 1989.

1987-1997: In 1987, the WCP area was designated a WQARF Priority List site. In 1997, ADEQ established the WQARF Registry which replaced the Priority List.

1996: United Industrial Corporation (United) and ADEQ entered into a Consent Decree in Federal Court to conduct the remedial investigation (RI) and feasibility study (FS) at the Site, and pay oversight costs. ADEQ also received $250,000 on past and future costs.

1998: The Site was placed on the WQARF Registry with a score of 47 out of a possible 120.

1999-2002: United operated a soil vapor extraction (SVE) system from August 1999 through October 2002 to remediate the contamination beneath the WOC property.

2004: United completed the soil cleanup at the property and permanently shut down the SVE system in March. United abandoned the West Osborn Complex Irrigation well in July. The well is believed to have been the conduit to the deeper contamination found at the Site.

In August, ADEQ issued the Draft RI Report prepared by United for the WCP WOC Site for public comment to meet the requirements established under Arizona Revised Statutes (A.R.S.) §49-287.03 and Arizona Administrative Code (A.A.C.) R18-16-406. The Land and Water Use Report prepared by ADEQ also went out for public comment. No comments were received during the 30-day comment period. A WCP Community Advisory Board meeting was conducted in November, pursuant to A.A.C., R18-16-406(I)(1), to discuss the RI Report, as well to obtain input on ROs for the Site.

2005: In April, ADEQ issued the Proposed Remedial Objectives (RO) Report for public comment to meet the requirements established under A.A.C. R18-16-406. Comments were received from the public and ADEQ issued the Final RO Report in May. In addition, since no comments were received on the Draft RI Report, this report has been accepted as the Final RI Report for the Site. In July, a notice was issued to the public indicating the availability of the Final RI Report and Final RO Report.

United submitted the Feasibility Study (FS) Work Plan for review and approval in June. The FS Work Plan was approved at the end of June 2005. United installed five additional wells between May and June as part of the ongoing FS. A groundwater report was submitted to ADEQ in August documenting the installation and sampling of the new wells.

2006: United is currently conducting the FS to evaluate specific remedial measures and strategies required to meet the remedial objectives so that the groundwater can be remediated. In June, as part of the FS, United installed additional monitoring wells to further define the extent of shallow groundwater contamination emanating from the WOC property. These new wells showed concentrations of TCE above the Arizona Water Quality Standard of 5.0 micrograms per liter (µg/L).

Contaminants:

The current contaminants of concern in groundwater include the chlorinated solvents tetrachloroethene (PCE) and trichloroethene (TCE). Contaminants of concern at the Site may change as new data become available. Other contaminants at the Site include methyl tertiary butyl ether (MTBE) and nitrates.

Public Health Impact:

To date, testing in the WCP area indicates no exposure to the contamination. Sampling shows that the contaminated soils are under asphalt parking lots or asphalt-surfaced storage areas, or under the concrete floors of buildings. Contaminated drinking water wells in the area have been shut down. In addition, notices have been sent out to all known residences within the WCP area for the testing of domestic wells for contamination.

Site Hydrogeology:

The Site is located within the West Salt River Valley sub-basin of the Phoenix Active Management Area (AMA). The Salt River Valley is an alluvial filled basin located in the Basin & Range physiographic province.

The lithology is characterized by a silty sand and sandy silt with interbedded clay layers and gravelly sand zones from ground surface to approximately 120 feet below ground surface (bgs). This is referred to as the water table aquifer. Beneath that, finer grained sediments dominate with minor coarser grained lenses to at least 800 feet bgs. There is one predominant coarser grained zone that is referred to as the lower sand and gravel subunit (LSGS). The LSGS is offset by a minor fault that trends east-west just south of the Site along Osborn Road. This fault does not act as a hydraulic barrier. The depth to the LSGS is approximately 250-300 feet bgs north of the fault and is approximately 350-400 feet south of the fault. Both the water table aquifer and the LSGS have been impacted by TCE contamination.

The Grand Canal is located along the northern edge of the Site. The Grand Canal was unlined in the vicinity of the West Osborn Complex Site until January of 1998, when it was lined on the bottom and both sides. Prior to the lining, the canal provided extensive recharge to the water table aquifer, forming a mound in the water table. After the canal was lined, the mound dissipated and water levels dropped, most significantly near the canal.

Depth to groundwater has declined considerably in the past several years. This is attributed principally to the lining of the Grand Canal, but also due to the ongoing drought. In 1992, the depth to groundwater was approximately 71 feet below ground surface (bgs) adjacent to the canal and approximately 100 feet bgs approximately 650 feet south of the canal. By 2002, the mound had dissipated and the depth to groundwater was approximately 128 feet bgs. Prior to lining the canal,

the groundwater flow direction varied from the south to the southeast beneath the Site at a gradient of approximately 0.02-0.04. After lining the canal, groundwater flows to the south beneath the Site at a gradient of approximately 0.001 to .002 (June 2003). Current depth to water in the area (as of January 2004) is between 128 feet and 138 feet bgs.

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Information Repositories:

Interested parties can review site information at the Information Repository at the Burton Barr Central Library (Arizona Room) located at 1221 N. Central Avenue in Phoenix (602) 262-4636. With 24 hour notice, an appointment to review related documentation is available Monday through Friday from 8:30 a.m. to 4:30 p.m., at the ADEQ Records Management Center, 1110 W. Washington Street in Phoenix, Arizona. Please contact (602) 771-4380 or (800) 234-5677 to schedule an appointment to review these documents.